CONCORDIA UNIVERSITY

Graduate Studies News

Published by: *The Graduate Studies Office*

Mailing Address: *S-205, 1455 de Maisonneuve Blvd. West Montreal, Quebec, H3G 1M8*

Location: *on the second and third floors of 2145 Mackay St.*

Telephone: *(514) 848-3800*

Vol. 2, No. 2 — February 1987

- **From the Dean's Desk**
  The Non-Thesis Master's Degree
- **The Master's Program in English**
- **Graduate Programs in Mechanical Engineering**
- **Graduate Profile**

From the Dean's Desk

The Non-Thesis Master's Degree

For many of our 3,000 graduate students, February 1987 will perhaps be the busiest month of their lives. They will the embroiled in the final stages of the preparation of their master's and doctoral theses in an attempt to meet the March deadlines for Spring Convocation. Today, this process has become technically easier and deadlines less menacing. It is now possible to make major changes in a document by using one's favourite word processor and yet have a superbly produced laser printout within a few hours of having made the ''final final'' revisions and corrections to a manuscript. Gone are the days when a student had to guard the only existing hard copy of a thesis with her/his life to avoid having to spend another tedious six months, rewriting and retyping the most treasured piece of writing that would ever be produced in her/his academic career. It is hard to describe the personal ''high'' and the sense of achievement associated with the final stages of the production of a thesis. For many of us the educational value attached to this time in our educational development is synonymous with the true meaning of ''graduate studies''. It requires a major shift in perspective and expectation to accept the trend towards ''non-thesis'' master's degrees.

In a survey of Canadian universities, conducted last fall by the Canadian Association of Graduate Schools, it was apparent that rather than being a training tool for doctoral research, the master's thesis may soon disappear altogether from the curricula of our best research-bound graduate students. The new time-frame envisaged by our main granting agencies (FCAR, N.S.E.R.C., and S.S.H.R.C.) for the completion of master's and doctoral degrees is moving in the direction of one-year master's and three-year doctoral programs. This target must be contrasted with the fact that the present average completion time of a master's degree is around two years and that of a doctoral program about five years. Within these projected, tightly structured degree expectations there is next to no margin for error or room for experimentation. A master's degree merely serves as a crucial preliminary stage for the gathering of information and the acquisition of highly specialized techniques required for doctoral work. We may lament this trend away from reflective education towards specialized instruction, but we cannot disregard it if we wish to attract bright externally-funded graduate students to Concordia University. We must therefore be prepared to offer non-thesis master's degrees to potential doctoral students. This leads to the somewhat novel idea that a master's degree with thesis serves essentially as a terminal degree.

At Concordia we are about to add a new twist to this development by moving in the opposite direction. We are proposing the introduction of a master's degree with thesis (M.Sc. in Administration) in the Faculty of Commerce and Administration, where the most successful master's degree in our University, in terms of numbers of students, is a Master's in Business Administration which has always been a non-thesis degree. The M.Sc. degree will provide a training ground for students aiming to enter our Ph.D. in Administration program. The point here is that trends are not universal, and that they are strongly influenced by the practices and traditions of the disciplines involved.

In the years to come we must display a large degree of flexibility and clearly maintain both options in many fields in order to accommodate the needs of the community we serve. The trend to recognize non-thesis master's degrees as an integral part of a doctoral program, and to view master's degrees with a thesis as terminal, has one serious consequence. This is the frequent and unacceptable practice of raising the standards of terminal master's theses beyond reasonable levels which will become more entrenched and more inequitable. It is not infrequent that supervisors point with pride to good master's theses and emphasize that "elsewhere" these theses are almost equivalent to doctoral dissertations. In this context it is incumbent on the Dean of Graduate Studies to ensure that the expectations placed upon thesis and non-thesis options of the same degree remain reasonably balanced.

M. E. Szabo

The Master's Program in English

With an enrollment of 169 students in the Master's program in English, Concordia boasts one of the largest graduate programs in English literature in Canada.

The department didn't achieve these large numbers by aiming itself in one particular direction and then channelling students along that same line. It's not the kind of place that tries to keep pace with the most recent literary trends, for example, by stressing experimental writing as a creative writing option.

In fact it's just the opposite. Flexibility and change are the forces that have had the greatest influence in determining the nature of the graduate program in English at Concordia.

Students can follow either an academic or creative writing stream, and in both cases, every attempt is made to allow them the greatest possible range of possibilities in their studies.

"The department doesn't seek to impose a standard outlook," explains Professor Mervin Butovsky, Program Director for the Master's program in English. "In the academic as well as the creative streams you have a diverse outlook of opinions."

Courses in the academic stream fall into broad categories of period and subject, Butovsky said, but every year different topics are stressed, "so that a student who will spend two years or so here will have the fullest range of choice."

Aside from following established guidelines for presentation and completion of material, those students in the creative writing stream have a virtually free hand in selecting the style and approach that they will use to write prose, poetry or drama.

The Master's program offers four options:

- **The MA with courses only**, offers a broad background in English literature and gives students the opportunity to study a wide range of periods and subjects. Fully qualified candidates are required to complete a minimum of 33 course credits, and to write a comprehensive examination. Students are given a reading list of set texts for this exam, and the exam itself is comprised of two parts — one set by the department dealing with questions that fall within broad categories of English literature, and another part on a specific area chosen by the student.

- **The MA with thesis**, involves course work and intensive research on an original topic which must be approved by the department. This work must be done under the guidance of a faculty adviser, and the completed project also involves an oral defense. Fully qualified candidates are required to take a minimum of 21 course credits in addition to the research work. Six of those 21 credits must be devoted to work outside the general area of the thesis, which may involve such topics as Twentieth Century, Canadian, or Renaissance literature.

- **The MA in creative writing**, an option in which students submit a creative writing thesis of book length. The procedure for approval of the thesis is the same as that for a research-oriented thesis, in which students must seek departmental approval before going ahead with the work, and must be prepared to give an oral defense of the thesis once it is completed. Students in the creative writing option must also complete 12 academic course credits and 12 course credits in the writing of prose, poetry or drama.

Professor Butovsky says that this focus on academic course requirements sets Concordia's Master's program in Creative Writing apart from other schools of writing, few, if any have academic course requirements.

- **The MA with departmental papers**, is comprised of 21 course credits and three departmental papers, each of which must be approximately 7,500 words in length. Each paper must deal with a different topic and be supervised by a different member of the department. An oral defence is also required.

The program involves 23 full-time faculty members, some of whom teach courses in the academic stream as well as giving workshops in creative writing. Many are published authors, and are actively involved in the production of literary publications. Quite often, the fictional and research works of more promising Concordia students are presented in these publications.

Butovsky says that while in the past many students in the program were either planning to become teachers, or were already teachers seeking to expand on their knowledge, the shortage of teaching positions in the secondary and post-secondary education systems has reduced the number of students intent on becoming teachers.

Nevertheless, graduates of the English program find themselves in a wide range of endeavors, from scriptwriting for television and film to public relations and advertising. For instance, two recent graduates are now working as literary agents in Montreal.

The areas of research chosen by those in the academic stream are diverse — with topics including anything from Shakespeare to feminist literary theory, to Canadian literature — as are the literary forms in which creative writing students present their work. The long poem, as a story-telling device, is beginning to emerge again in students' work, Butovsky says, and this represents a marked departure from the lyric poem, which has lately been the most commonly used poetic form.

There are 169 students in the program (112 full-time, 57 part-time) with 95 in the academic stream and 74 in creative writing. "Students are attracted to the program because they go in for the fullest range of possibility that language presents," Professor Butovsky says.

Fellowships and teaching assistantships are regularly available to students in the program, and this year two have received fellowships from Concordia and 11 have received teaching assistantships.

For more information regarding the graduate program in English, call Professor Butovsky at (514) **848-2350** or write care of Concordia University at 1455 de Maisonneuve Boulevard West, Montreal, Quebec, H3G 1M8, Canada.

Graduate Programs in Mechanical Engineering

It's a good thing that graduate programs in Mechanical Engineering at Concordia stand head and shoulders above other Canadian programs. Consider what universities are up against:

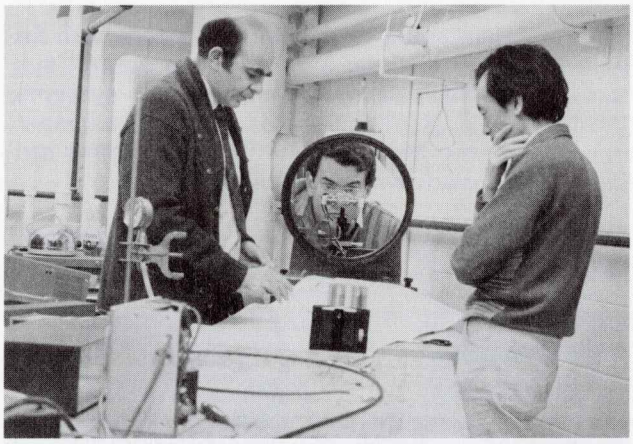
Stuart Smith, the president of the Science Council of Canada, was quoted recently as saying that Canada has failed to mount a serious national research effort because this country lacks industries which are hungry for the latest knowledge and the most advanced technology.

"The big problem in Canada is not a lack of research but a lack of demand for research," he said. "Old so-and-so in the corner lab may be working on something absolutely vital, but if nobody demands it, then he'll live and die in the corner and nobody will have any idea whether that work could have been of any value.

"The industries are not sniffing around saying, 'What have you got? What's doing? I need something. I've got a problem.' "

The Mechanical Engineering department at Concordia receives a moderate amount of industrial research contracts, and in terms of government funding, the department receives more research funding (on a per faculty basis) than any other Canadian university.

Every year the department receives $3 to $4 million, the bulk in federal funding, for research work to be carried out by 25 full-time professors and their student assistants. Concordia thus remains at the fore-



Dr. A. Saber and graduate students conducting Transient Gas Jet Investigations in combustion laboratory.

front of research and academic training in Mechanical Engineering in Canada.

"We have a world-class research program in the Department of Mechanical Engineering. We're as good as anybody, anywhere," says Dr. Aaron Saber, Program Director of the Master's and Ph.D. programs in Mechanical Engineering at Concordia.

Proof of this is the fact that the department has an international reputation. Fully 50 percent of the students enrolled in the Master's and Ph.D. programs are from overseas.

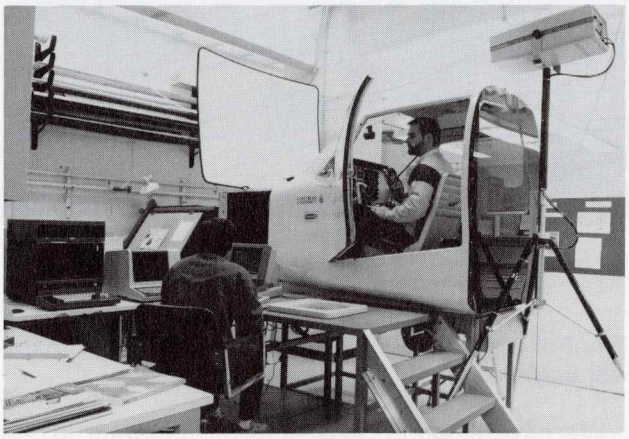
While industry has been slow to make use of university research, company recruitment officers from across Canada call in search of students to fill positions in their firms, Dr. Saber said. "Our graduated students are working in industries worldwide, and

that goes not only for international students, but for our Quebec students as well.'' Aside from international students, Quebec students make up the remaining 50 percent of those attending programs in Mechanical Engineering at Concordia.

Entrance requirements are tough, and applicants to the Master's program are expected to have completed a Bachelor's degree in Engineering with a minimum grade point average of 3.00. The ability to write simple programs in a standard computer language is assumed, and those lacking this skill are required to take a supplementary computer course.

Three options are available in the Master's program: Option A, the thesis-oriented option, in which a 45-credit program is comprised of 24 credits derived from course work and 21 credits from a research thesis; Option B, the course-oriented option, in which a 45-credit program is comprised of 42 credits of course work and a three-credit, independent project and report; and Option C, the aeronautics option, in which a 45-credit program is comprised entirely of course work.

The five main areas of research in Mechanical Engineering at Concordia are: industrial control systems, materials science, mechanical systems, thermo-fluid engineering and aeronautical engineering. In both the Master's and Ph.D. programs students must work with a faculty adviser.



Flight simulation laboratory.

The department boasts a wide range of laboratories and state-of-the-art equipment. Those facilities include laboratories for: computer-aided design, robotics, ergonomics, composite materials, fluid mechanics, machine tools, flight simulation, fuel control, solar energy, vibration and heat transfer.

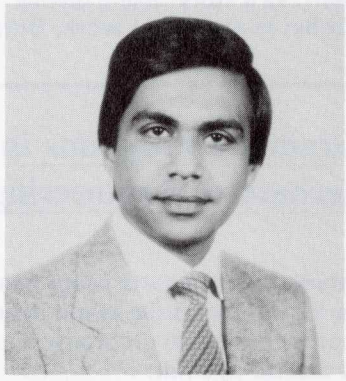
The department ensures that its professors are actively involved in their respective fields either as consultants or researchers. Some faculty members are known around the world for their achievements and most are frequently published in scholarly journals, as are their students.

A total of 103 students attend graduate level programs in Mechanical Engineering, with 67 at the Master's level (49 full-time, 18 part-time) and 26 at the doctoral level (18 full-time, eight part-time).

Those who would like further information on the graduate programs in Mechanical Engineering can contact Dr. Aaron Saber at (514) **848-3136** or write care of Concordia University at 1455 de Maisonneuve Boulevard West, Montreal, Quebec, H3G 1M8, Canada.

Now, if only Canadian industries would catch on to what almost everybody else already knows...

Graduate Profile: A.K. Waizuddin Ahmed



Waizuddin Ahmed, now employed as a Research Assistant Professor in the Faculty of Engineering and Computer Science at Concordia, finished his doctoral degree in May 1986. His thesis research was in the area of railway vehicle dynamics — specifically, on developing a new concept of elasto-damper-coupled wheelset for performance improvement of railway freight car systems.

Dr. Ahmed received both his B. Eng. and Ph.D. (Mechanical Engineering) from Concordia. He was accepted directly into the Ph.D. upon completion of his Bachelor's degree in 1980. His academic merit is acknowledged by the numerous grants and scholarships he has acquired, namely from: FCAR, N.S.E.R.C., Transport Canada, and Concordia.

Editor: Madelaine Palko
Writer: John Morrissy
Editorial Assistant: Madeleine Yates

typesetting: PARA Graphiques Ltée
printing: Concordia University Printing Services
photographs: p. 3 - Brian M. McNeil
p. 4 - Brian M. McNeil